

Mathematics KS5

Mathematics A Level

	AUTUMN TERM	SPRING TERM	SUMMER TERM
Year 12	Algebraic manipulation Graphs, linear and quadratic inequalities Straight lines and circles Binomial expansions Differentiation Integration Trigonometry Algebraic manipulation	Vectors Proof Exponentials and logarithms Statistical sampling Data presentation and interpretation Probability and Statistical Distributions Statistical hypothesis testing Analysis of data	Kinematics in one dimension Forces and Newton's laws Revision and summer exams
Year 13	Binomial Theorem, sequences and series Trigonometry and circular measure Functions and transformations Further differentiation Further integration Numerical methods Parametric equations	Trigonometry and circular measure Partial fractions and integration Differential equations Kinematics in 2 dimensions Equilibrium and resolving Statics and dynamics Moments Further probability	Statistical distributions Statistical hypothesis testing Revision and summer exams

Further Mathematics A Level

	AUTUMN TERM	SPRING TERM	SUMMER TERM
Year 12	<p>Matrices Matrix transformations Complex numbers Roots of polynomials Ellipse, hyperbola and parabola Rational functions and inequalities</p>	<p>Polar coordinates Further calculus Series Plus optional content from 2 of the following options: Discrete Mathematics Mechanics Statistics</p>	<p>Rational functions and inequalities Hyperbolic functions Proof by induction Optional content</p>
Year 13	<p>Parametric equations Complex numbers Matrices Further vectors Further calculus Hyperbolic functions</p>	<p>Kinematics Statics and dynamics Moments Plus optional content from 2 of the following options: Discrete Mathematics Mechanics Statistics</p>	<p>Revision and summer exams</p>